

Serial Number 09/893,465

### REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Amendments to Claims

Claim 1 has been amended to include the limitations of claim 7, indicated as allowable in item 22 on page 7 of the final Office Action.

Claims 8 and 9 have been amended to depend from claim 1 rather than from canceled claim 7.

Claim 19 has been amended to include the limitations of original claims 11 and 18, claim 19 having been indicated as allowable in item 22 on page 7 of the Official Action.

Claims 21 and 22 correspond to original claims 8 and 9, but depend from independent claim 10 rather than from claim 1.

2. Rejection of Claims 1-4, 6, 11, and 13-17 Under 35 USC §102(b) in view of U.S. Patent No. 6,902,202 (Veil)

This rejection has been rendered moot by the addition to claim 1 of the limitations of claim 7, and by the addition to claim 19 of the limitations of claims 11 and 18.

3. Rejection of Claims 5 and 17 Under 35 USC §103(a) in view of U.S. Patent Nos. 6,092,202 (Veil) and 5,659,616 (Sudia)

This rejection has also been rendered moot by the addition to claim 1 of the limitations of claim 7, and by the addition to claim 19 of the limitations of claims 11 and 18.

Serial Number 09/893,465

4. Rejection of Claim 10 Under 35 USC §103(a) in view of U.S. Patent No. 6,092,202 (Veil) and "When A Password Is Not A Password" (Weiss)

This rejection is respectfully traversed on the grounds that the Veil patent and Weiss article, whether considered individually or in any reasonable combination, fail to disclose or suggest protection of the smartcard by multiple PINs *that must be combined in order to access the smartcard*. Instead, Veil discloses protection of a smartcard by a single PIN, while Weiss discloses use of a challenge-response PIN and a challenge code to access a smartcard. The challenge code of Weiss is not combined with a challenge-response PIN, and therefore Weiss does not disclose or suggest the claimed multiple PINs.

It is noted that claim 10 has been amended to include a limitation originally included in allowable claim 8, namely the combination of multiple input PINs to form a combined PIN that is compared with the PIN stored on the smartcard. However, claim 10 does not include all of the limitations of original claim 8, and in particular excludes the limitations that the card stores an authentication level, that the combination is by means of a logical exclusive OR, that the key is a private key, and that the smartcard performs all operations involving the key. Nevertheless, it is believed that amended claim 10 is patentable because the Weiss patent does not disclose or suggest PIN protection using multiple PINs that are combined by the file signing tool before comparison with the stored PIN.

As pointed out in the previous response, the Weiss article discusses the use of security tokens and challenge response scripts to *supplement* conventional single PINs or passwords, such as the ones that Veil relies upon to protect private keys retrieved by the file signing tool (security co-processor 122), rather than multiple PINs. There is no suggestion in the Weiss publication of multiple PINs that must be combined to access a smartcard, as specifically recited in claim 10. To the contrary, in Weiss, a single PIN stored on the token is used to protect the token. The challenge-response protocol cited by the Examiner is not equivalent to the PIN, but rather is carried out by the controller of the terminal with which the token is to be used. As explained in the paragraph bridging pages 107-108 of the Weiss publication, entry of a single correct PIN provides access to a device. The challenge response routine does not even begin until after

Serial Number 09/893,465

verification of the PIN, and involves encryption of the user's response *by the token* (i.e., the smartcard), access to the encryption device having been granted upon entry of the PIN. The challenge-response routine verifies the token, rather than protecting access to the token. Thus, neither the password nor the challenge-response disclosed by Weiss can be considered equivalent to multiple smartcard-protecting PINs, as claimed.

Since the Veil patent and Weiss publication do not disclose the multiple PINs of amended claim 10, withdrawal of the rejection of claim 10 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC



By: BENJAMIN E. URCIA  
Registration No. 33,805

Date: September 12, 2005

BACON & THOMAS, PLLC  
625 Slaters Lane, 4th Floor  
Alexandria, Virginia 22314

Telephone: (703) 683-0500

\\B&T\Prose\B&T\Pending A.J\1020050912\BACON091214.pdf